AMERICAN MUSEUM NOVITATES

Published by

Number 1022 THE AMERICAN MUSEUM OF NATURAL HISTORY April 12, 1939

New York City

AFRICAN TACHINIDAE—II

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The first paper in this series, published in Novitates No. 751, dealt chiefly with the genus *Linnaemya* Desvoidy. The present contribution contains descriptions of three new genera and new species from the southern half of Africa. Unless otherwise stated the types are in The American Museum of Natural History.

AFROPHASIA, NEW GENUS

Differs from *Oestrophasia* Brauer and Bergenstamm in having the apical cell long petiolate, the venation being very similar to that of *Hyalomya* Desvoidy.

MALE.—Front not wider than the ocellar triangle above, strongly widening anteriorly, with numerous fine frontals in a single row on the anterior two-thirds; parafrontals narrower than frontal vitta; ocellars moderately strong; verticals gently convergent, the outer verticals not developed. Occiput flattened, slightly bulged on the lower half. Cheeks a little less than half as wide as the eye-height, haired on most of their surface, the oral margin strongly oblique on anterior half. Parafacials bare, becoming very narrow below. Facial depression shallow, the oral margin not produced. Two pairs of almost equal oral vibrissae and one or two bristles above them, the indistinct vibrissal angles practically level with the oral margin. Proboscis short; palpi very gently clavate. Antennae reaching to below the middle of the face, the third segment about one-third longer than wide, its apex evenly rounded; arista microscopically pubescent, thickened on basal fifth. Eyes bare. One or two irregular pairs of presutural acrosticals and two pairs of postsuturals; dorsocentrals 2–3; two posterior sublaterals situated side by side; no posthumeral; two strong intra-alars, the prealar absent; three pairs of equally strong marginal scutellars, the apical pair decussate; two sternopleurals; propleura and prosternum bare; no infra-squamal setulae. Postscutellum strongly developed. Legs normal; anterior tibiae with two posterior bristles; middle tibiae with one anterodorsal near the apical third and two posterodorsal bristles; posterior tibiae with two anterodorsals and a row of short posterodorsals ending in a longer bristle near the apical third. Claws and pulvilli of medium length. Wing venation similar to *Hyalomya*, the wings not broadened; petiole of apical cell longer than the apical crossvein and ending slightly behind the tip of the wing; posterior crossvein joining the apical cell a little nearer to the anterior crossvein than to the bend of the fourth vein; a single bristle at the base of the third vein. Squamae broad near the base, the apex rounded. Abdomen oval, about one-third longer than wide somewhat tapering on the apical half, convex above; hairs all erect and bristle-like, but there are stronger discals on the intermediate segments and the marginals are strong. Genitalia of moderate size, but not prominent; sternites and sometimes the membrane exposed.

FEMALE.—Agrees except in head and abdominal characters. The front is a little more than one-third the head width and is gently convex both in lateral view and in cross-section; nine or ten pairs of frontals and two pairs of orbitals, the parafrontals wider than the frontal vitta above but narrower below. Outer verticals weak. Abdomen more tapering than in the male, the fourth segment ending in a wide slit from which projects a large cylindrical tube that extends to the base of the abdomen and is a little enlarged apically. The abdominal hair is sub-appressed and there are scattered, short hairs on the tube of the ovipositor.

GENOTYPE.—*Afrophasia dimorphia*, new species.

Afrophasia dimorphia, new species

Reddish or ferruginous, the male with black thorax. Length, 3.5 to 4 mm.

MALE.—Head with white pollen, the occiput black to the lower level of the eyes, the parafrontals sometimes blackish; occiput without pollen except below. Frontal vitta orange, sometimes brown on the upper half; antennae orange, the arista black except at the base.

Thorax shining black, with thin cinereous pollen, the mesonotum thinly brown pollinose.

Legs reddish, the tips of the posterior four femora black; tarsi brownish, becoming pale at the base.

Wings cinereous hyaline, the base narrowly luteous; epaulet black. Squamae brownish. Halteres reddish yellow.

Abdomen slightly shining reddish yellow. Each segment with a conspicuous black spot on the hind margin toward each side, those on the second segment sometimes weak.

FEMALE.—Parafrontals and occiput shining

reddish yellow. Thorax shining reddish yellow, thinly whitish pollinose; knees only slightly darkened. Abdomen inclined to be somewhat ferruginous, the black spots absent on the fourth segment, tube of the ovipositor very pale yellowish.

In the female the bristles are all weaker than in the male and less numerous on the abdomen; a pair of marginals on the first segment, a pair on the second and three toward each side, on the third segment the marginal row is curved so far forward that they appear as discals except laterally, while on the fourth segment they are absent. There are one or two pairs of discals on the second segment, a row near the basal fourth of the third segment with the median pair stronger and three or four irregular pairs of short ones on the fourth segment. In the male the marginal row on all the segments is arched forward in the middle.

TYPES.—Holotype, male, East London, South Africa, March 4, 1925. Allotype, female, East London, February 24, 1923. Paratypes: male and female, East London, October 10, 1924, and April 18, 1925; one male, Pretoria, October 21, 1919; all collected by Mr. H. K. Munro. Types in South African Government Museum.

Podomyia discalis, new species

Black, with cinereous pollen. Length, 6.5 mm.

MALE.—Front about half as wide as one eye, with nine pairs of frontals, three of them below the base of the antennae, the upper two strong and reclinate. Frontal vitta brown, almost as wide as one parafrontal; parafrontals with cinereous pollen. Ocellars long and strong; outer verticals absent. Occipital pile pale yellowish. Cheeks about one-seventh as wide as the eye-height, black-haired. Parafacials gently narrowing below where they are narrower than the third antennal segment. Facial ridges with bristles on more than the lower half, the vibrissae situated level with the oral margin. Palpi brown. Antennae blackish, not reaching to the vibrissae, moderately narrow, the apex of the third segment angular above, rounded below; second segment more than half as long as the third; arista thickened to slightly beyond the middle.

Thorax black, with cinereous white pollen, the mesonotum with the pollen thin; dark vittae narrow, visible only in certain lights, the median pair replaced by a dark rectangle behind the suture. Acrosticals and dorsocentrals 3–3; prealar almost as long as the bristle behind it; apical scutellars erect and parallel; three sternopleurals.

Legs black; middle tibiae with a single anterodorsal bristle; posterior tibiae ciliate with well separated bristles; claws and pulvilli elongate.

Wings cinereous hyaline; third vein with two bristles at the base. Squamae white with yellow rim. Halteres reddish yellow.

Abdomen black, the basal third or slightly more of the second to fourth segments cinereous white pollinose, the pollinose bands narrowed medianly on the second and third segments. Hair appressed except on the fourth segment. First and second segments each with strong marginals, the third and fourth with a row; second segment with or without a pair of discals, the third with one or two pairs irregularly placed, the fourth with a row.

TYPES.—Holotype, male, and paratype, male, Salisbury, Southern Rhodesia, November 13, 1936 (A. Cuthbertson).

This species differs from other members of the genus by the presence of discals on the intermediate abdominal segments and the less closely ciliate posterior tibiae.

Sturmia halli, new species

Differs from *negator* Curran by its smaller size, wholly hyaline wings and the more extensive pollen. Black, the palpi and sides of abdomen of male reddish; abdomen with broad cinereous bands. Length, 9 to 10 mm.

MALE.—Head with silvery white pollen, the frontal pollen with strong yellow tinge. Front three-fourths as wide as one eye, the vitta brown. About nine pairs of frontals, the lower three below the base of the antennae, the upper two reclinate; a few bristly hairs outside the frontals, frontal hair otherwise fine. Ocellars long and strong; outer verticals not developed; no setulae behind the occipital cilia. Cheeks one-seventh the eye-height, with rather fine black hair. Parafacials bare, slightly narrowing below. Vibrissae very slightly above the anterior oral margin, the ridges with four or five bristly hairs above them. Palpi reddish, with black hair. Antennae black, rather narrow, reaching almost to the vibrissae, the third segment a little more than twice as long as the second; arista thickened on the basal third, the second segment a little longer than wide.

Thorax rather thickly cinereous pollinose, the black mesonotal vittae distinct and slightly shining. Sternopleurals 2–1–1 or 2–2; four pairs of marginal scutellars, the apical pair decussate. Scutellum reddish with blackish base.

Legs black; middle tibiae with a single anterodorsal bristle; posterior tibiae rather closely ciliate and with one long bristle in the row; pulvilli moderately short.

Wings cinereous hyaline, the veins luteous basally; four to six setulae at the base of the third vein; apical cell narrowly open far before the wing tip. Squamae white. Halteres reddish with the knob more or less brown.

Abdomen with the apex of the first segment, the second and broad base of the third broadly reddish laterally. Basal two-thirds of the second and third segments and a little more than half of the fourth cinereous pollinose. First and second segments each with a pair of long margi-

nals, the third and fourth each with a row, the fourth with a row of discals. Hair appressed except on the fourth segment. Under side of the abdomen with rather thick, long hair but without any distinct sexual patch.

FEMALE.—Front as wide as one eye, distinctly widening anteriorly; pollen of the head silvery white with only a trace of yellow on the inner margins of the parafrontals; outer verticals half as long as the verticals. Pollinose abdominal bands slightly wider.

TYPES.—Holotype, male and allotype, female, Gatooma, Southern Rhodesia, May, 1936, ex larva of *Heliothis obsoleta*. Paratypes: one male, same data and three males, Mazoe, Southern Rhodesia, October, 1929 (W. J. Hall), ex pupa of *Heliothis obsoleta*.

RHODESINA, NEW GENUS

Rather similar to *Achaetoneura* Brauer and Bergenstamm but the parafacials are pilose.

Front of male two-thirds as wide as one eye, widening anteriorly, the frontal vitta fully as wide as parafrontal; nine or ten pairs of frontals, three below the base of the antennae, the upper two reclinate; a row of bristly hairs outside the frontals, the hair long and fine, not abundant; ocellars long and strong, proclinate. Outer verticals absent; occipital pile wholly black. Cheeks one-fifth the eye-height. Parafacials moderately wide, narrowing below, with numerous, moderately long black hairs. Vibrissae level with the oral margin; facial ridges bristled on about the lower half. Palpi clavate, with rather abundant short black hair. Antennae reaching to the lowest fifth of the face, rather narrow, the third segment one-third longer than the second. Arista bare, the basal segments short. Eyes with very short, sparse hairs.

Dorsocentrals 3–4; acrosticals 3–3; 3 intraalars; posterior sublateral and posthumeral bristles strong; five marginal scutellars, the apical pair weak and decussate; two sternopleurals; infrasquamal setulae absent; propleura bare; prosternum with hair.

Legs normal; pulvilli short; front tibiae with two posterior bristles, the middle pair with two strong anterodorsals, the hind pair evenly ciliate.

Wings cinereous hyaline; third vein with two or three basal bristles; bend of fourth vein angular or nearly so, without appendage or fold. Squamae large.

Abdomen moderately depressed, as wide as the thorax and almost twice as long as wide, narrowing posteriorly from the middle of the second segment. First segment with a pair of weak marginals, the second with strong pair; third segment with row of strong, the third with row of weak marginals, the fourth with row of discals; hair appressed. Sternites concealed, the genitalia small.

FEMALE.—One pair of orbitals; frontal vitta narrower than parafrontal; outer verticals present; occipital pile cinereous; abdomen more oval.

GENOTYPE.—*Rhodesina parasitica*, new species.

Rhodesina parasitica, new species

Black, the sides of the abdomen more or less broadly reddish; pollen cinereous. Length, 9 to 10 mm.

MALE.—Front and most of the parafacials brown pollinose, the pollen cinereous on the occiput, cheeks and lower parafacials. Hair wholly black. Palpi brown; antennae blackish. Thorax cinereous pollinose, the vittae narrow, but from posterior view seeming to fuse behind the suture; scutellum with about the apical third reddish yellow in ground color.

Legs black. Wings cinereous hyaline, the veins luteous basally. Squamae white. Halteres reddish.

Abdomen black, the sides of the second and third segments broadly reddish, the second darkened apically, the third with broad black apex. Basal half or less of the second to fourth segments cinereous white pollinose, the pollen thin except on the broad bases of the segments but broadening toward the sides, the bands narrowly interrupted in the middle. Hair black. No sexual patch.

FEMALE.—Head silvery white pollinose; pollen of thorax less changeable in different lights; abdomen less clearly but more extensively reddish.

TYPES.—Holotype, male, Salisbury, Southern Rhodesia, December, 1933 (No. 3587). Allotype, female, Salisbury (No. 1016). Paratypes, three males, Salisbury, February, 1929 (A. Cuthbertson), parasitic on *B? fusca* (Nos. 2326, 2340 and 3067).

Nemorilla afra, new species

Differs from *cruciata* Wiedemann in lacking the white quadrate spots on the corners of the mesonotum. Black, the sides of the abdomen more or less reddish; pollen cinereous and brown. Length, 6 to 9 mm.

MALE.—Front about two-fifths as wide as one eye; ten to twelve pairs of frontals, none of them reclinate, the anterior four below the base of the antennae; ocellars moderately short; verticals short, the outer verticals very weak. Parafrontals dull black, white pollinose on the anterior half, a large black spot separating the face and front, the hair fine but not dense; frontal vitta brown. Face and occiput silvery white pollinose, the cheeks with thin cinereous or brownish pollen; occipital pile black. Hair of cheeks fine and black, the cheeks about one-tenth the eye-height. Parafacials yellowish in ground color, very narrow. Palpi dull reddish. Vibrissae of moderate length. Antennae black, the third segment narrowly reddish basally and almost one-half longer than the second; arista thickened on basal fourth. Eyes with pale brown pile.

Thorax rather thinly brown pollinose, the hair

black. Four pairs of lateral scutellars, the apical pair decussate; two sternopleurals; prosternum with hair.

Legs black; hind tibiae evenly ciliate; pulvilli large.

Wings cinereous hyaline, the base tinged with brown; a single weak setule on the base of the third vein.

Abdomen more or less broadly reddish laterally, the apices of the segments usually darkened. Pollen brown, with interrupted white bands on the bases of the second to fourth segments, the spots forming the bands visible in only certain lights; on the second segment there are a pair of dorsal and a pair of large lateral spots, on the third there are: a pair of dorsocentral, a pair of smaller subdorsal and a pair of large lateral spots; on the fourth the spots are more or less fused, the apical half of the segment being shining brownish black. First and second segments with pair of weak marginals, the third and fourth each with a row, the fourth with numerous discals and erect bristly hair, the hair on the other segments appressed. There is no distinct sexual patch but the hair is longer and more abundant on the under side of the apical tergites toward the middle.

FEMALE.—Front half as wide as one eye, the parafrontals mostly whitish pollinose; two pairs of orbitals and the upper two or three pairs of frontals reclinate; hair sparse; outer verticals long and fine. Cheeks almost all white pollinose; facial depression yellow in ground color. Antennae reddish with the third segment brown on about the upper half. Thorax cinereous pollinose; mesonotum with the broad sides cinereous, the disc brown with a pair of widely separated cinereous vittae that broaden and unite just before the scutellum and extend onto its sides. Pulvilli small. Fourth abdominal segment usually reddish. Pale pollen much more extensive, especially on the third segment where, in some lights, it covers most of the segment; on the second segment the pale spots are larger, but still separated, on the fourth the pale band is as in the male.

TYPES.—Holotype, male, allotype, female, and paratypes, two males and one female, Lourenco Marquis, June 10, 1925 (C. B. Hardenberg). One paratype, female, Fort Grey, Cape Province, South Africa, February 13 (Forester).

AFROLIXA, NEW GENUS

Related to *Lixophaga* Townsend but the prosternum bears a pair of bristles, the face is more strongly receding, etc.

MALE.—Front two-thirds as wide as one eye, seven or eight pairs of frontals, the lower two or three below the base of the antennae, the upper two reclinate; ocellars long; verticals parallel; outer verticals absent. Cheeks about one-fourth the eye-height, with sparse, coarse hairs. Parafacials strongly narrowing below, with a few hairs below the frontals. Facial depression rather shallow, quite wide and not narrowed below, the oral margin not produced. Vibrissae level with oral margin, the facial ridges with four or five bristles on the lowest fourth. Palpi clavate, with coarse, short black hairs. Antennae reaching almost to the vibrissae, the third segment broad and with almost parallel sides, the apex subangular above and rounded below, five times as long as the second; arista thickened on the basal third, the basal segments short. Face strongly receding, being only a little more than half as long below as at the antennae. Eyes bare.

Acrosticals and dorsocentrals 2–3; posterior sublateral and anterior intra-alar strong; three strong marginal scutellars and a weak, parallel apical pair; three sternopleurals; infrasquamal setulae absent; propleura bare; prosternum with a pair of bristles anteriorly.

Third vein with two or three basal setulae; apical cell closed in the wing margin near the apex of the wing; posterior crossvein closer to bend of fourth vein than to anterior crossvein. Costal spine absent. Squamae large.

Legs normal; anterior tibiae with two posterior bristles; middle tibiae with one anterodorsal; posterior tibiae not ciliate. Pulvilli small.

Abdomen moderately flattened, one half longer than wide, gently tapering apically. First and second segments each with a pair of marginals, the third and fourth each with a row; second to fourth segments each with a pair of discals. Genitalia small.

FEMALE.—Front four-fifths as wide as eye; seven or eight pairs of frontals and two pairs of orbitals; antennae somewhat narrower; abdomen only a little longer than wide, the fourth segment with several weak discals in addition to the strong pair.

GENOTYPE.—*Afrolixa macula*, new species.

Afrolixa macula, new species

Black, with whitish pollen. Length, 4.5 to 6 mm.

MALE AND FEMALE.—Head silvery white pollinose; hair black except on the middle of the occiput; palpi and antennae brown, the basal antennal segments sometimes brownish red.

Thorax cinereous white pollinose. When viewed from behind the mesonotum appears black, with the broad sides in front of the wings, a quadrate median spot in front of the suture, a narrow sutural band and a broad prescutellar band whitish; from other views the areas appearing dark are seen to be covered with pale brownish pollen. Hair black.

Legs black. Wings cinereous hyaline, the veins luteous basally. Squamae pale yellowish. Halteres pale orange.

Abdomen black, the second to fourth segments each with the basal third to half white pollinose, the pale fasciae more or less distinctly interrupted in the middle, the apices of the second and third segments thinly brown pollinose. Hair wholly black.

TYPES.—Holotype, male, allotype, female, and paratypes, three males and one female, Lourenco Marques, October 30, 1928 (C. Fuller), $\frac{59}{90}$ reared from a Chrysomelid larva. The types are in the South African National Museum.